Breast and Cervical Cancer Control Program Clinical Update

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Welcome to the first issue of "Clinical Update." This insert will be available on a quarterly basis to discuss clinical issues in depth.

Human Papilloma Virus Affects Millions in U.S.

By Claudia Himes, R.N.

uman Papilloma Virus (HPV) is a disease that infects an estimated 24-40 million people in the United States. Genital HPV is considered by health experts to be one of the two most common sexually transmitted diseases (STD), along with genital herpes. HPV is actually a family which contains over 70 viruses. Some types cause warts on the face, hands, or feet, while others cause warts or HPV-type infections in the genital area, known as genital HPV.

The majority of people who have HPV are unaware of the infection. The genital warts caused by certain types of HPV are usually painless, and in some cases are so small that they can only be seen through a microscope. In other cases, the HPV infection can only be detected through laboratory tests. People with HPV often transmit it to their sexual partners without knowing that they are infected. Certain HPV types (usually not the ones that cause genital warts) are associated with precancerous cervical changes, and cervical cancer. HPV is often not observed. This is one explanation as to why it is so widely prevalent.

Several high-risk types of HPV have been associated with benign condylomata. Low grade cervical intraepithelial lesions (CIN1) are HPV's 6 and 11, while HPV's 16, 18 and 33 have been associated with high-grade lesions and invasive cervical cancer. High risk types of HPV have been found in 93 percent of cervical cancers worldwide; although an extremely small percentage of women with HPV develop cervical cancer. Infection with HPV alone does not necessarily translate into cervical cancer. Co-factors such as the use of oral contraceptives, a weakened immune system, poor diet (it has been noted that women with abnormal Pap tests tend to have low levels of folic acid, selenium, and vitamins A,C,E) or the presence

of other STD's are involved in the initiation and promotion of cervical cancer.

A woman can significantly decrease her risk of developing cervical cancer by having annual Pap tests combined with appropriate follow-up treatment. Patient education is an essential component for early detection and treatment. However, many health care professionals are uncomfortable broaching the subject of sexual activity and many people find it embarassing to talk about STD's. This creates additional barriers to providing patient education. These feelings may be compounded when it comes to discussing STD's with women who are 50 and older. Women who are sexually active (regardless of age) are at risk for contracting HPV. Women who are no longer sexually active should continue to have routine Pap tests due to the fact that HPV can recur even after years of latency. It is important that patients be informed of the risk factors for HPV, the link between genital HPV and cervical cancer, and the need for annual Pap tests.

There are many advances in the fight against HPV's that are implicated in cervical cancer. Human testing has begun on a vaccine developed by a team of scientists against two strains of the high-risk types, HPV16 and HPV18. Research is also being directed toward HPV typing as a useful adjunct to the standard approach of Pap tests and colpscopy.

If you have any questions on HPV, contact Claudia Himes, R.N., Nurse Consultant at (800) 452-1955.

REFERENCES:

American Social Health Association Quaterly Newsletter. Vol.4. Number 2&3 Winter/Spring 1997.

American Social Health Association Quaterly Newsletter. Vol.3. Number 1. Fall 1995.

American Social Health Association Quaterly Newsletter. Vol.5. Number 3. Spring 1998.

Possible Vaccine for Cervical Cancer Virus

By Claudia Himes, R.N.

ne day it may be possible to vaccinate women against cervical cancer. Testing has begun on a vaccine developed against two strains of the virus; HPV 16 and HPV 18. HPV 16 and HPV 18 are most often linked to cervical cancer.

In an article by Peter Modica of the Medical Tribune News Service, it was noted that a team of scientists from Cardiff, Manchester and Cambridge led by professor L.K. Borysiewicz, developed a vaccine against two strains of the HPV virus.

In the case study, eight women with late-stage cancer were given the experimental vaccine. One of the women was noted to have produced a type of immune response, and was found to be free of cancer 15 months after the vaccination was given. In addition, researchers detected antibodies against HPV in three of the other patients participating in the study.

Further testing of the vaccine has begun at the University of Rochester Medical Center. Researchers at the University began a year-long study in September of 1997. About 100 people were expected to participate in the study.

The testing will determine any notable side effects of the vaccine and whether it produces an immune response that would protect people from the HPV virus. If the vaccine works, it could have a significant impact on women's health issues.

REFERENCES:

"Scientists Find Lead to Possible Cervical Cancer Vaccine," Medical Tribune News Service, Peter Modica, 1996. "New Vaccine Shows Promise for Cervical Cancer," Doctors Guide to Medical and Other News, May, 1996.

Statistics About Cancer of the Cervix in Texas

Incidence and Mortality in Texas

- 1,288 women are expected to be diagnosed with cancer of the cervix in 1998.*
- 1,318 women are expected to be diagnosed with cancer of the cervix in 1999.*
- The number of cases and age-adjusted incidence rates by race and ethnicity for cancer of the cervix is 16.73 for Hispanic women, 15.01 for African American women, and 9.05 for Anglo women.
- The number of deaths and age-adjusted mortality rates by race and ethnicity for cancer of the cervix is 6.62 for African American women, 4.70 for Hispanic women, and 2.44 for Anglo women.

Racial Differences

- Anglo women had the lowest incidence and mortality from cancer of the cervix in the study area (PHR 1, 7-11, 1985 1992).
- Hispanic and African Amerian women had similar incidence rates; however Texas African American women experienced 40 percent greater cervical cancer mortality

than Hispanic women and 2.7 times greater mortality than Anglo women in the study area (PHR 1, 7 - 11m 1985 - 1992).

*Expected numbers obtained by applying age and race/ethnic-specific rates in Texas for PHR 1,7-11 in 1985 - 1992, to the Texas statewide population in 1998 and 1999.

Source: Texas Cancer Registry: Cancer Incidence & Mortality in Texas Public Health Regions 1, 7 - 11, 1985 - 1992.

Cervical Cancer Incidence and Mortality Rates

Rate per 100,000 10 Incidence Mortality

Anglo Hispanic
African American